

## Practical – 3

**AIM:** Implement the given layout using Linear Layout.

**CODE:**

**ActivityMain:**

```
package com.example.prac3

import android.os.Bundle

import androidx.activity.enableEdgeToEdge
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat

class MainActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)

        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v,
insets ->

            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right,
systemBars.bottom)

            insets

        }
    }
}
```

**XML FILE:**

```
<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
```

```
android:layout_width="match_parent"
android:layout_height="match_parent"
android:orientation="vertical"
android:padding="8dp">
```

```
<!-- Top Half -->
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:orientation="horizontal">
```

```
<!-- Block 1 (Spanning two rows) -->
```

```
<TextView
    android:layout_width="0dp"
    android:layout_height="match_parent"
    android:layout_weight="2"
    android:layout_gravity="center"
    android:background="#E91E63"
    android:gravity="center"
    android:text="1"
    android:textSize="24sp"
    android:textColor="#FFFFFF" />
```

```
<!-- Right-side blocks (Block 2, 3, 4) -->
```

```
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="match_parent"
```

```
android:layout_weight="2"
android:orientation="vertical">
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:orientation="horizontal">
```

```
<!-- Block 2 -->
```

```
<TextView
    android:layout_width="0dp"
    android:layout_height="match_parent"
    android:layout_weight="1"
    android:background="#4CAF50"
    android:gravity="center"
    android:text="2"
    android:textSize="24sp"
    android:textColor="#FFFFFF" />
```

```
<!-- Block 3 -->
```

```
<TextView
    android:layout_width="0dp"
    android:layout_height="match_parent"
    android:layout_weight="1"
    android:background="#FF9800"
    android:gravity="center"
    android:text="3"
```

```
        android:textSize="24sp"
        android:textColor="#FFFFFF" />
    </LinearLayout>

<!-- Block 4 -->
<TextView
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:background="#F44336"
    android:gravity="center"
    android:text="4"
    android:textSize="24sp"
    android:textColor="#FFFFFF" />
</LinearLayout>
</LinearLayout>

<!-- Bottom Half -->
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:orientation="horizontal">

<!-- Left blocks (Block 5, 6) -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="match_parent"
```

```
android:layout_weight="2"
android:orientation="vertical">
```

```
<!-- Block 5 -->
```

```
<TextView
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:background="#9C27B0"
    android:gravity="center"
    android:text="5"
    android:textSize="24sp"
    android:textColor="#FFFFFF" />
```

```
<!-- Block 6 -->
```

```
<TextView
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:background="#03A9F4"
    android:gravity="center"
    android:text="6"
    android:textSize="24sp"
    android:textColor="#FFFFFF" />
```

```
</LinearLayout>
```

```
<!-- Block 1 (Repeating block) -->
```

```
<TextView
```

```
        android:layout_width="0dp"
        android:layout_height="match_parent"
        android:layout_weight="2"
        android:background="#E91E63"
        android:gravity="center"
        android:text="1"
        android:textSize="24sp"
        android:textColor="#FFFFFF" />
    </LinearLayout>
```

```
<!-- Bottom Row -->
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:orientation="horizontal">
```

```
<!-- Block 2 -->
```

```
<TextView
    android:layout_width="0dp"
    android:layout_height="match_parent"
    android:layout_weight="1"
    android:background="#4CAF50"
    android:gravity="center"
    android:text="2"
    android:textSize="24sp"
    android:textColor="#FFFFFF" />
```

```
<!-- Block 3 -->
```

```
<TextView
```

```
    android:layout_width="0dp"
```

```
    android:layout_height="match_parent"
```

```
    android:layout_weight="1"
```

```
    android:background="#FF9800"
```

```
    android:gravity="center"
```

```
    android:text="3"
```

```
    android:textSize="24sp"
```

```
    android:textColor="#FFFFFF" />
```

```
<!-- Block 4 -->
```

```
<TextView
```

```
    android:layout_width="0dp"
```

```
    android:layout_height="match_parent"
```

```
    android:layout_weight="1"
```

```
    android:background="#F44336"
```

```
    android:gravity="center"
```

```
    android:text="4"
```

```
    android:textSize="24sp"
```

```
    android:textColor="#FFFFFF" />
```

```
</LinearLayout>
```

```
</LinearLayout>
```

**OUTPUT:**

